

Recombinant Human ATM, GST-tagged

Cat. No. ATM-9987H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human ATM protein, fused to GST-tag, was expressed in E.coli and purified by GSH-sepharose.
Species	Human
Source	E.coli
ProteinLength	1332-1479a.a.
Description	The protein encoded by this gene belongs to the PI3/PI4-kinase family. This protein is an important cell cycle checkpoint kinase that phosphorylates; thus, it functions as a regulator of a wide variety of downstream proteins, including tumor suppressor proteins p53 and BRCA1, checkpoint kinase CHK2, checkpoint proteins RAD17 and RAD9, and DNA repair protein NBS1. This protein and the closely related kinase ATR are thought to be master controllers of cell cycle checkpoint signaling pathways that are required for cell response to DNA damage and for genome stability. Mutations in this gene are associated with ataxia telangiectasia, an autosomal recessive disorder.
Storage	The protein is stored in PBS buffer at -20°C. Avoid repeated freezing and thawing cycles.
Storage Buffer	1M PBS (58mM Na ₂ HPO ₄ , 17mM NaH ₂ PO ₄ , 68mM NaCl, pH8.) added with 100mM GSH and 1% Triton X-100, 15% glycerol.

GENE INFORMATION

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Gene Name	ATM ataxia telangiectasia mutated [Homo sapiens]
Official Symbol	ATM
Synonyms	ATM; ataxia telangiectasia mutated; ATA, ataxia telangiectasia mutated (includes complementation groups A, C and D) , ATC, ATD, ATDC; serine-protein kinase ATM; TEL1; telomere maintenance 1; homolog (S. cerevisiae); TELO1; AT mutated; A-T mutated; TEL1, telomere maintenance 1, homolog; AT1; ATA; ATC; ATD; ATE; ATDC; MGC74674; DKFZp781A0353;
Gene ID	472
mRNA Refseq	NM_000051
Protein Refseq	NP_000042
MIM	607585
UniProt ID	Q13315
Chromosome Location	11q22-q23
Pathway	ATM mediated phosphorylation of repair proteins, organism-specific biosystem; ATM mediated response to DNA double-strand break, organism-specific biosystem; Apoptosis, organism-specific biosystem; Apoptosis, conserved biosystem; Autodegradation of the E3 ubiquitin ligase COP1, organism-specific biosystem; BARD1 signaling events, organism-specific biosystem; BRCA1-associated genome surveillance complex (BASC), organism-specific biosystem;
Function	1-phosphatidylinositol-3-kinase activity; ATP binding; DNA binding; DNA-dependent

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

protein kinase activity; histone serine kinase activity; nucleotide binding; protein N-terminus binding; protein binding; protein complex binding; protein dimerization activ

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA